UNITED STATES PATENT AND TRADEMARK OFFICE

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10/514,423	11/16/2004	Takashi Nomura	029267.55611US	6463

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CROWELL & MORING LLP
INTELLECTUAL PROPERTY GROUP
P.O. BOX 14300
WASHINGTON, DC 20044-4300

EXAMINER
HOANG, SON T

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>03</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 August 2010</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-4,8-12,14-17,20,21 and 32</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) <u>8-12 and 32</u> is/are allowed.

6)☒ Claim(s) <u>1-4,14,16,20 and 21</u> is/are rejected.

7)☒ Claim(s) <u>15 and 17</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>16 November 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   This communication is in response to the amendment filed on August 6, 2010.

   Claims 5-**7**, **13**, **18-19**, and **22-31** are canceled.

   Claims 1-**4**, **8**, **12**, **14-17** are amended.

   Claim 32 is newly added.

   Claims 1-**4**, **8-12**, **14-17**, **20-21**, and **32** are pending.

Response to Argument

2.   Applicant's arguments with respect to the 35 U.S.C. 103(a) rejections of the

pending claims have been fully considered but are moot in view of the new ground of

rejections presented hereon.

Claim Objection

3.   **Claim 14** is objected to due to incomplete sentence of "*the basic data prepared*

in order not to exceed..." on lines 22-24. It is believed that the correct sentence should

be "*the basic data is prepared in order not to exceed...*"

Claim Rejections - 35 USC § 103

   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   **Claims 1**-**4**, and **20**-**21** are rejected under 35 U.S.C. 103(a) as being obvious

over <u>Nakano et al.</u> (*Pub. No. EP 1134674, published on September 19, 2001;*

hereinafter <u>Nakano</u>) in view of <u>Ogaki et al.</u> (*Pub. No. US 2002/0059024, filed on August*

29, 2001; hereinafter <u>Ogaki</u>), and further in view of <u>Rutledge et al.</u> (*Pat. No. US*

6,650,998, filed on July 28, 1997; hereinafter <u>Rutledge</u>).

Regarding **claim 1**, <u>Nakano</u> clearly shows and discloses a map data processing

apparatus (F*igure 1*), comprising:

a recording medium drive unit that receives a recording medium in which are

recorded map data including a structure having the map-related information (*The first*

storage device 19 is typically composed of a storage device which is capable of

rewriting data, such as a hard disk drive or a flash memory. The first database 11 1 is

stored in the first storage device which contains at least one cartographic file CF which

allows this terminal device 1 to function as a navigation system, [0043]); and a structure

having management information for the map-related information (*Figure 7 shows the*

data structure of the unit header which contains management information about the unit

data in the cartographic file CF. The unit header at least includes the unit ID, the version

code, and the data sizes of the eight kinds of tables contained in the unit data, [0133]),

wherein:

an update data acquisition unit that obtains update data for the map-related

information (*When the user of the terminal device 1 wants to add a new cartographic file*

CF to the first storage device 19 or update an old cartographic file CF to a newer

version, the user operates the input device 11 to activate the map request/receive

function, [0188]); and

a processing unit that updates the map-related information recorded in the

recording medium by using the update data obtained by the update data acquisition unit

and the management information, and executes processing of the map data based

upon the map-related information recorded in the recoding medium, the update data

obtained by the update data acquisition unit and the management information (*When*

the data processing portion 13 decides that the version code extracted from the master

data MD is newer, it moves to the step S906 to extract only the data portion of the

master data MD and stores the newer-version cartographic file CF in the first storage

device 19. The old cartographic file CF in the first database 111 has thus been updated

to a newer version, [0215]), wherein:

Ogaki then discloses:

a plurality of levels are defined, each in correspondence to one of a plurality of

different scaling factors at which the map is rendered (*Figure 8*); and

a plurality of sets of the map-related information are provided in correspondence

to the plurality of levels (*Figures 26A – 26D*).

It would have been obvious to an ordinary person skilled in the art at the time of the invention was made to incorporate the teachings of <u>Ogaki</u> with the teachings of <u>Nakano</u> for the purpose of designating a zoom-in or zoom-out level, thereby allowing a desired map to be displayed using only the essential map data ([0010] of <u>Ogaki</u>).

<u>Rutledge</u> then discloses:

the map is divided into a plurality of divisions at each level, and each of the plurality of sets of map-related information, corresponding to a given level, is divided into units corresponding to the plurality of divisions into which the map is divided (*Figure 3 shows a plurality of zoom levels and the map in each zoom level is divided into multiple parts*);

divided map-related information corresponding to each of the units comprises basic data available at all levels and extension data available at one or more specific levels but not all levels (*when zoom level is decreased, the system adds additional thematic overlays to increase the details being displayed, [Column 8, Lines 30-36]. It is quite clear that only the added layers (claimed extension data) are only available at higher zoom level, and the layers at the lowest zoom level (claimed basic data) are available at all zoom levels*),

the basic data and the extension data being provided separately from each other (*Figures 2A and 2B shows the lowest layer and higher layers are provided separately, [Column 4, Lines 51-60]*);

the basic data is used to display the map at a display device (*Figure 4A shows zoom layer 305 includes a tile 300 that represents a portion of a general map of a country. Such a map, when displayed on computer terminal 110, illustrates gross details, such as state boundaries,* [Column 5, Lines 24-27]);

the extension data contains information used in route search (*Figure 4A shows zoom layer 345 includes a plurality of tiles 340, each representing a map of a neighborhood corresponding to the area represented by tiles 330,* [Column 5, Lines 40-43]); and

the processing unit executes processing of the map data by using the divided map-related information comprising the basic data and the extension data (*Figures 4A-4D*).

It would have been obvious to an ordinary person skilled in the art at the time of the invention was made to incorporate the teachings of <u>Rutledge</u> with the teachings of <u>Nakano</u>, as modified by <u>Ogaki</u>, for the purpose of using a search system to qualify queries and information records by temporal and geographical references, such as those provided by a map-based directory system ([Abstract] of <u>Rutledge</u>).

Regarding **claim 2**, <u>Ogaki</u> further discloses:

the map is divided into a plurality of first divisions, the first divisions are each divided into a plurality of second divisions, a number of the second divisions is equal among the individual first divisions, and the divisions into which the map is divided each corresponding to one of the second divisions (*Figure 8*); and

the management information contains a set of management information related

to the plurality of second divisions, provided in correspondence to each of the first

divisions (*Figures 26A-26D*).

Regarding **claim 3**, <u>Ogaki</u> further discloses the management information further

contains management information related to the plurality of first divisions (*Figures 26a-*

26D).

Regarding **claim 4**, <u>Ogaki</u> further discloses:

the map is divided into a plurality of first divisions at each level, the first divisions

are each divided into a plurality of second divisions, the number of second divisions is

equal among the individual first divisions, and the divisions into which the map is divided

each corresponding to one of the second divisions (*Figure 8*);

the management information contains a set of management information related

to the plurality of first divisions provided in correspondence to each of levels, and also

contains a set of management information related to the plurality of second divisions

provided in correspondence to each of the first divisions (*Figure 26A-26D*).

Regarding **claim 20**, <u>Nakano</u> further discloses:

the map data are map display data; and the processing unit displays a map at a

display unit by connecting the map data recorded in the recording medium with the

update data obtained by the update data acquisition unit (*When the user of the terminal*

device 1 wants to add a new cartographic file CF to the first storage device 19 or update

an old cartographic file CF to a newer version, the user operates the input device 11 to

activate the map request/receive function, [0188]).

Regarding **claim 21**, <u>Nakano</u> further discloses:

the map data are route search data; and the processing unit executes route

search processing by connecting the map data recorded in the recording medium with

the update data obtained by the update data acquisition unit (*Through the input device,*

the user requests the terminal device 102 to scroll the map, to change the scale, etc.

The output device is mainly composed of a display and a speaker. The display displays

a map as required as well as the results of route search or route guide carried out by

the data processing portion, [0239]).

5.   **Claims 14**, and **16** are rejected under 35 U.S.C. 103(a) as being unpatentable

over <u>Nakano</u> in view of <u>Rutledge</u>, and further in view of <u>Le et al.</u>(*Pub. No US*

2002/0191867, filed on July 10, 2001; hereinafter <u>Le</u>).

Regarding **claim 14**, <u>Nakano</u> clearly shows and discloses a map data processing

apparatus (*Figure 1*), comprising:

a recording medium drive unit that receives a recording medium in which are

recorded map data including a structure having the map-related information (*The first*

storage device 19 is typically composed of a storage device which is capable of

rewriting data, such as a hard disk drive or a flash memory. The first database 11 1 is

stored in the first storage device 19 which contains at least one cartographic file CF

which allows this terminal device 1 to function as a navigation system, [0043]); and a

structure having management information for the map-related information (*Figure 7*

shows the data structure of the unit header which contains management information

about the unit data in the cartographic file CF. The unit header at least includes the unit

ID, the version code, and the data sizes of the eight kinds of tables contained in the unit

data, [0133]), wherein:

an update data acquisition unit that obtains update data for the map-related

information (*When the user of the terminal device 1 wants to add a new cartographic file*

CF to the first storage device 19 or update an old cartographic file CF to a newer

version, the user operates the input device 11 to activate the map request/receive

function., [0188]); and

a processing unit that updates the map-related information recorded in the

recording medium by using the update data obtained by the update data acquisition unit

and the management information, and executes processing of the map data based

upon the map-related information recorded in the recoding medium, the update data

obtained by the update data acquisition unit and the management information (*When*

the data processing portion 13 decides that the version code extracted from the master

data MD is newer, it moves to the step S906 to extract only the data portion of the

master data MD and stores the newer-version cartographic file CF in the first storage

device 19. The old cartographic file CF in the first database 111 has thus been updated

to a newer version, [0215]), wherein:

Rutledge then discloses:

the map-related information is divided into units corresponding to a plurality of

divisions into which the map is divided (*Figure 3 shows a plurality of zoom levels and*

the map in each zoom level is divided into multiple parts);

divided map-related information corresponding to each of the units is separated

into basic data and extension data to be individually managed (*Figures 2A and 2B*

shows the lowest layer and higher layers are provided separately, [Column 4, Lines 51-

60]), the basic data having higher priority than the extension data (*when zoom level is*

decreased, the system adds additional thematic overlays to increase the details being

displayed, [Column 8, Lines 30-36]. *It is quite clear that only the added layers (claimed*

extension data) are only available at higher zoom level, and the layers at the lowest

zoom level (claimed basic data) are available at all zoom levels. Since layers at the

lowest zoom level are available at all zoom levels, it is clear that they have higher

priority to display than layers at higher zoom levels).

It would have been obvious to an ordinary person skilled in the art at the time of

the invention was made to incorporate the teachings of Rutledge with the teachings of

Nakano, for the purpose of using a search system to qualify queries and information

records by temporal and geographical references, such as those provided by a map-

based directory system ([Abstract] of Rutledge).

Le then discloses:

the basic data prepared in order not to exceed a predetermined upper data size

limit; and the processing unit executes processing of the map data by using the divided

map-related information where the basic data is prepared in order not to exceed the

predetermined upper data size limit (*The size changing unit (14) serves to generate a*

set of image data items (image data items in hierarchies) corresponding to each of the

respective zoom ratios by expansion or compression, [0051]. *It is clear that the lowest*

level of zooming will be accompanied with map pictures with compressed sizes).

It would have been obvious to an ordinary person skilled in the art at the time of

the invention was made to incorporate the teachings of Le with the teachings of

Nakano, as modified by Rutledge, for the purpose of browsing a data file that contains

text and image data by utilizing a storing mechanism for storing the data file as a

plurality of image data items (hierarchical image data items) with different image sizes

by expansion or compression.

Regarding **claim 16**, Rutledge further discloses the map-related information with

the highest priority includes at least information used to display the map at a display

device (*when zoom level is decreased, the system adds additional thematic overlays to*

increase the details being displayed, [Column 8, Lines 30-36]. *It is quite clear that only*

the added layers (claimed extension data) are only available at higher zoom level, and

the layers at the lowest zoom level (claimed basic data) are available at all zoom levels.

Since layers at the lowest zoom level are available at all zoom levels, it is clear that they

have higher priority to display than layers at higher zoom levels).

Allowable Subject Matter

6.   Status of the following claims are as follows:

Claim 8 is allowed over the prior arts. **Claims 9-12**, and **32** are also allowed

based on their dependencies on **claim 8**.

Claims 15 and **17** are objected to as being dependent upon the rejected base

claim 14, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

Conclusion

7.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Contact Information

8.   Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Son T. Hoang whose telephone number is (571) 270-1752. The Examiner can normally be reached on Monday – Friday (7:00 AM – 4:00 PM).

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Neveen Abel-Jalil can be reached on (571) 272-4074. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S.T.H/
Examiner, Art Unit 2165
October 21, 2010

/NEVEEN ABEL JALIL/

Supervisory Patent Examiner, Art Unit 2165